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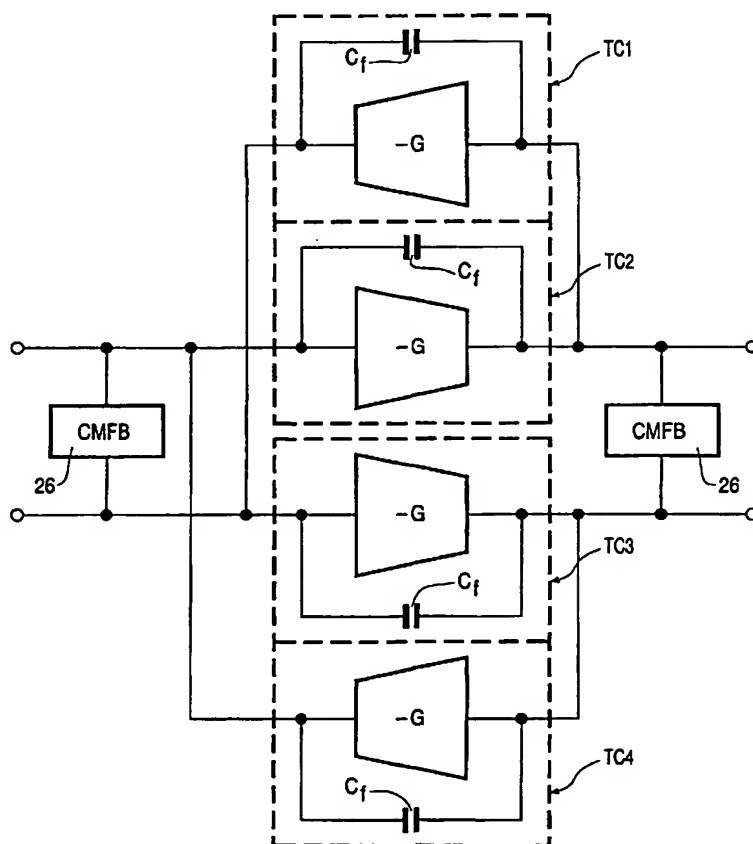
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(54) Title: **BALANCED GYRATOR AND DEVICES INCLUDING THE BALANCED GYRATOR**



(57) **Abstract:** A balanced gyrator comprises interconnected pairs of single-ended inverting class AB transconductors (TC1 to TC4) fabricated from MOSFETs together with common mode feedback circuits (26) connected between balanced inputs (18,19) and outputs (22, 23). Peaking of the frequency response resulting from distortion due to the creation of a high frequency parasitic feedthrough path in the transconductors is overcome by the provision in each of the transconductors (TC1 to TC4) of a non-reciprocal feedback capacitance (C_f) which renders the feedthrough capacitance reciprocal thereby neutralising the feedthrough capacitance of the gyrator. The devices include a filter (Figure 8, not shown) and a transceiver (Figure 10, not shown).